



LANDSAT 7 MONTHLY UPDATE

The Landsat 7 Mission, developed by the National Aeronautics and Space Administration, is managed by the U.S. Geological Survey under authority established by Presidential Decision Directive NSTC-3.

Program News

Landsat Monthly Renamed

We have changed the name of this publication from the Landsat 7 Monthly Update to the Landsat Monthly Update. The new title better reflects the expanded scope of the Landsat Program with the addition of Landsat 5 operations. In addition to reports about Landsat 7, we will include more information on Landsat 5 and the National Land Remote Sensing Program.

Mission Operation Center

Landsat 7: Two Delta-V maneuvers on September 14, 2001 and September 18, 2001 were completed this month to maintain the +/- 5 km WRS requirement and prepare for an upcoming Delta-I maneuver. A Delta-I maneuver is planned for October 9, 2001 to maintain a Mean Local Time (MLT) about 10 am, Zulu time. Imaging is expected to be impacted from approximately 11:30:00Z October 9, 2001 to 04:00:00Z October 11, 2001. A new Scheduler release occurred on September 17, 2001, which provides a new Special Request feature that is easier to schedule and allows more flexibility in making requests even though antenna and duty cycle resources remain the primary limiters. Due to the U.S. National emergency on September 11, 2001, operations were reduced to essential personnel and automated when possible. No disruption in service occurred.

Landsat 5: Three Delta-V maneuvers on September 4, 2001, September 17, 2001, and September 27, 2001 were completed this month to maintain the +/- 10 km WRS requirement. The MLT is currently at 9:52 am. A Delta-I maneuver is being considered for the Spring. USGS is leading an ongoing investigation into the "Caterpillar Tracks" that have been observed in the imaging as a result of the Shutter and Scan Mirror out of phase condition. Current investigation attributes this to Bumper Wear exacerbated by colder operating temperatures due to fewer stations receiving data. A temporary or possibly permanent fix has been implemented that keeps the instrument on during specific periods without the transmitter on, which maintains the temperature balance needed for Phase Lock.

Technical News

Data Validation

During the month of September four International Ground Stations (IGSs) passed their biannual data validation exercise. Another IGS has, for the first time, provided the USGS with Raw CC data that can be processed and validated to be of equivalent quality to the corresponding data residing at the EROS Data Center (EDC). The IGSs are Hiroshima, Japan (biannual), Cordoba, Argentina (biannual), Alice Springs, Australia (biannual), Hobart, Australia (biannual) and Maspalomas, Spain (first validation). At this time there are 13 of 16 cooperating IGSs validated with either Raw CC or LORp data.

Metadata

EDC began archiving metadata from Neustrelitz, Germany (NSG), and Kiruna, Sweden (KIS) on September 21, 2001. Metadata from Canada and Australia continue to be archived successfully. As of September 28, 2001, metadata were archived for 5,529 L7 IGS subintervals and 105,955 L7 Worldwide Reference System (WRS) scenes.

Hartebeesthoek, South Africa (JSA) and Bangkok, Thailand (BKT) submitted metadata for testing this month. Testing will continue for these, and hopefully other stations.

The EOSDIS Core System (ECS) continues to work to support new IGS, and to make the horizontal display shift field optional. It is anticipated that the implementation of these changes at EDC will occur in the next two months. Another ECS change will enable path/row searches for IGS metadata using the EOS Data Gateway. This ECS functionality will be tested next month, and implemented by the end of the year. IGS metadata and browse ingest from tape has been delayed. Testing is planned to begin this year, and will carry over into 2002.

Meetings

Landsat Ground Stations Operations Working Group 30

After the tragic events of September 11, 2001, the Landsat Program decided to postpone LGSOWG 30. With the uncertainty about domestic and international air travel that followed the attacks on New York and Washington, DC, we felt that it was in the best interest of all participants to reschedule the meeting. Our new dates for LGSOWG 30 are November 12 – 15, 2001, in Orlando, Florida. As before, we will meet in the Rosen Plaza Hotel. Participants should contact Brad Heegel (heegel@wise.augie.edu) and inform Brad of your new flight arrival and departure information. We regret any inconvenience this postponement may have caused and thank you for your patience. The Landsat team is looking forward to seeing all participants in Orlando.

Upcoming Meetings

<u>Meeting</u>	<u>Timeframe</u>	<u>Location</u>
LGSOWG 30	Sep 2001	Orlando, Florida
LTWG 11	Jan/Feb 2002	Australia
LTWG 12	May/Jun 2002	Argentina
LGSOWG 31	Oct 2002	TBD
LTWG 13	Apr/May 2003	TBD

Related News

New International Ground Stations

The Landsat 7 network welcomes a new IGS, Ulaanbaatar, Mongolia (ULM). ULM is operated by the German Space Agency (DLR) through a cooperative agreement with the Government of Mongolia. In addition to being the newest IGS, ULM is also our first “campaign” station. Campaign stations are only active for a short time (no more than 192 days per year) and acquire a limited amount of data (up to 5,000 scenes per year). The campaign station concept was developed by the USGS to serve the global community without adversely affecting existing “full coverage” stations.

The Landsat Monthly Update is an informal communication tool, prepared monthly and distributed electronically to USGS Landsat partners, to provide information about Landsat activities and related topics of interest. Comments, corrections, and queries may be directed to Judy Knox at the following email address: jknox@usgs.gov.